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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/197,506	11/23/1998	RICHARD GIOSCIA	SOA-246	1334

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EXAMINER

CHOW, CHARLES CHIANG

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/197,506

Applicant(s)

GIOSCIA ET AL.

Examiner

Charles Chow

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5-7,10-17,19-22 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,10-17,19-22 and 24-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Office Action for  
applicant's amendment  
(8/23/2002)***

1. Regarding applicant's reconsideration based on the argument for the no teaching of the removable memory for storing of the context information; the displaying of the context information, related to the music distribution via broadcast; Knox does teaches the displaying of the song title in the LCD window (figure in cover page), storing the received music information in the memory (abstract, col. 3, lines 24-26).

Patent to Moe teaches the recording receiving device (figure in cover page) for storing the received TV broadcast program, audio and video, to the short term storage media STS, and transferred to the long term storage media LTS (abstract, Fig. 10, fig. 7, 9, col. 2, line 26-32). The short/long storage media is the removable memory for storing of the context information of the TV video/audio program.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 2, 15-17, 19-21, 27, 29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification, or drawing, in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The above claims are related to the method which is not adequately written in the description, since there is no drawing which clearly describe the steps for the method in the claims.

***Claim Rejections - 35 USC§ 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. (US 5,239,540) in view of Knox (US 6,212,359), and further in view of Moe (US 5,345,430).

Regarding **claim 1**, Rovira discloses a method of providing listeners with information about audio programming being digitally broadcast comprising combining a data signal carrying contextual information about said audio programming with an audio signal carrying said audio programming, (see in abstract, in Fig. 1, 5, 6, 8, the apparatus and method for transmitting, receiving, and communicating the audio broadcast program data signals which are combined with digital data signals, having compressed digital audio multiplexed with the program information, such as the title, the digital audio track, the artist information, the record label, the year, and transmits the combined signals via satellite to a receiving station). Rovira discloses the receiving station de-multiplexes signals and sends the combined signal to subscriber's digital tuner for separating the digital audio from the program data. The digital audio is decoded in ASIC, and the program data is processed by the microprocessor. The decoded audio program data is displayed on the display device, while listening to the audio. It also shows in Fig. 7, the input device, keyboard 207, the controlling processor 203, and the display 209 for audio programs. In column 4, line 1-8, it also shows the means of communi-

cation could be via wireless communication.

Rovira et al. does not explicitly indicate the receiver for directly receiving the broadcast audio.

Knox teaches the receiving said combined data and audio signals with a receiver, the separating said data and audio signals; displaying said contextual information of said data signal on a display device of said receiver (see in abstract, col. 2, line 60 to col. 3, line 3, col. 9, line 55 to col. 10, line 10, it shows the remote digital receiver receives the broadcast digital audio with the program information). Knox shows at least one receiver/tuner device responsive to the digital audio and program information and corresponding control signals by said controlled device, said program information comprising alphanumeric information. Knox shows a display for displaying the alphanumeric characters associated with said program information and corresponding selected commands, as shown in claim 1. In abstract, Knox shows the demodulating of the said combination signals to output music in stereophonic sound, for separating the data and audio signals and transducing audio to audible sound. In col. 7, line 50-62, Knox shows the viewing and storing the program information. In col. 8, it shows the digital audio signals is combined with the typical program message including information concerning the composer, the track title, the artist, the album associated with the track title, and custom information for current performance. It's obviously a good feature to display the audio program on user's display such that the user could directly select the program.

Besides, Knox does teaches the displaying of the song title in the LCD window (figure in cover page), storing the received music information in the memory (abstract, col. 3, lines 24-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Knox's wireless receiver for receiving the digital data and the

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audio data, demodulating of the combination signal to output music in stereophonic sound and display the corresponding program by means of an alphanumeric display, to Rovira ,as modified above, such that the user could directly listen to the digital audio with displayed corresponding program.

In the above it does not clearly indicate the storing portion of contextual information in removable memory medium.

Moe teaches the recording receiving device (figure in cover page) for storing the received TV broadcast program, audio and video, to the short term storage media STS, and transferred to the long term storage media LTS (abstract, Fig. 10, fig. 7, 9, col. 2, line 26-32). The short/long storage media is the removable memory for storing of the context information of the TV video/audio program. In Fig. 10, the radio broadcast information is stored in removable memory, digital tape 108, audio tape 107. Moe provides the solution for storing the broadcast video/audio onto the removable memory tape such that the music could be retrieved from the portable tape. It's apparently obvious to include Moe's storing of the video/audio program to digital/audio tape, to Rovira as modified above, such that the system could be upgraded for storing the broadcast program in portable tape. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and include Moe's storing of the video/audio program to digital/audio tape, to Rovira as modified above, such that the system could be upgraded for storing the broadcast program in portable tape for future retrieval.

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Rovira discloses **claim 2**, the broadcasting said combined data and audio signals as a digital radio signal (see in column 2, line 19-23, and in column 2, line 30-34, it shows the digital transmission information contains the where the audio program information is combined with the digital audio, and the signal transmission can be coaxial cable or via satellite).

4. Claims 5-7, 10-13 are rejected under 35 U. S. C. 103 (a) as being unpatentable over Rovira in view of Knox, and further in view of Moe, and further in view of Freeny, Jr. (US 5,694,162).

In the above it does not explicitly indicate the transceiver.

Regarding **claim 5**, Freeny teaches a transceiver for receiving said broadcast signal (see in title, in abstract, in Fig. 1, in column 2, line 43-65, and in column 3, line 8-20). Freeny teaches the method and apparatus for automatically changing broadcast programs based on the audience response. The audience receiver unit 22a, 22 b, receives the broadcast digital program. The audience response unit 24a, 24b transmits the audience user selected program to the broadcast network control system 14 for subsequently broadcast the user selected audio programs from broadcast network transmitter system 12 of the system 10. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Freeny, Jr.'s audience receiver 22a, 22b, and response unit 24a, 24b, to Rovira et al. as modified above, such that the user selected audio program could be transmitted to the broadcast network also.

Regarding a receiver for receiving a broadcasting signal which is an audio signal and a data

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signal combined, said data signal containing contextual information about audio programming carried by said audio signal; a signal processor for separating said audio and data signals; and an audio output device for outputting said audio signal (refer to the patent disclosure discussion in claims 1-4 above for the claimed features).

Regarding **claim 6, 7**, refer to the patent disclosure discussion in claim 1 above which has introduced above, having the disclosed feature for user input device for controlling the display device for textual information, from Rovira et al., as shown in Fig. 7, keyboard 207, processor 203, and display 209.

Regarding **claim 10**, refer to the patent disclosure discussion in claim 1 above, Rovira considered the microphone input 111 for commands of operating audio recordings and/or text in storage 107 (col. 4, lines 42-50). Rovira also considered the keyboard 119, mouse at input device (col. 5, lines 28-29, and input means in col. 48, line 3).

Regarding **claim 11**, Logan teaches the transmitting back user selected program to the distribution system (abstract, as shown above).

Regarding **claim 12**, refer to the patent disclosure discussion in claim 11 above which also provides the disclosed features for this claim.

Regarding **claim 13**, refer to the patent disclosure discussion in claim 8 above which also provides the disclosed features for this claim.



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5. Claims 14-17, 19-22, 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. in view of Knox, and further in view of Takahisa et al., and further in view of Takahisa (US 5,579,537).

In the above it does not explicitly indicate the wireless connection.

Takahisa teaches **claim 14**, the said connection to said service provider is a wireless connection (see in abstract, in column 17, line 46-55). Takahisa teaches the broadcast system in which digital data are transmitted along with audio. Takahisa teaches the communication link could be using the wireless link. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Takahisa's wireless link for broadcast audio program data, to Rovira et al. as modified above, such that the audio digital data could be implemented to the wireless communication system.

Regarding **claims 15, 16**, refer to the patent disclosure discussion in claims 1, 2, 5 above which also provides the disclosed features for this claim. Regarding the storing the portion of the contextual information in a removable memory cartridge, referring to examiner's comment in claim 1 above.

Regarding **claims 17, 24**, refer to the patent disclosure discussion in claim 7 above which also provides the disclosed features for this claim.

Regarding **claims 19, 21, 22, 26**, refer to the patent disclosure discussion in claims 1-5, 11 above which also provides the disclosed features for this claim.

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Regarding **claim 20**, refer to the patent disclosure discussion in claim 4 above which also provides the disclosed features for this claim.

Regarding **claim 25**, refer to the patent disclosure discussion in claims 1, 8 above which also provides the disclosed features for this claim.

Regarding **claim 27, 29**, referring to examiner's comment in claim 1 above for the storing portion of the audio programming onto removable memory medium.

Regarding **claim 28, 30**, referring to examiner's comment in claim 1 above for the storing portion of the contextual information onto removable memory medium.

***Response to argument  
and  
Conclusion***

6. Applicant's arguments with respect to claims 1, 2, 5-7, 10-17, 19-22, 24-30 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant argument for the no teaching of the removable memory for storing of the context information; the displaying of the context information, related to the music distribution via broadcast; Knox does teaches the displaying of the song title in the LCD window (figure in cover page), storing the received music information in the memory (abstract, col. 3, lines 24-26).

Patent to Moe teaches the recording receiving device (figure in cover page) for storing the received TV broadcast program, audio and video, to the short term storage media STS, and transferred to the long term storage media LTS (abstract, Fig. 10, fig. 7, 9, col. 2, line 26-32). The short/long storage media is the removable memory for storing of the context information of the TV video/audio program. In view of the prior arts, the argument are moot, and claims

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1, 2, 5-7, 10-17, 19-22, 24-30 are remaining in the rejection manner.

7. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2684.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Hunter, can be reached at (703)-308-6732.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington D. C. 20231

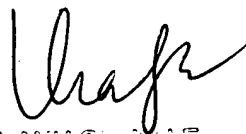
Or Faxed to: (703)-872-93143 (for formal communications intended for entry)

Or hand-delivered to: Crystal Park 11, 2121 Crystal Drive, Arlington, VA, Sixth Floor,  
Receptionist.

For general inquiry or relating to the status of this application should be directed to the Group  
Receptionist whose telephone number is (703)-306-0377.

Charles Chow

October 21, 2002

  
EXAMINER 11/4/02  
T. Zhou